

WHAT IS CLAIMED IS:

1. An in-plane switching liquid crystal display device, comprising:
first and second substrates;
5 a plurality of data lines on the first substrate;
a plurality of gate lines crossing the data lines on the first substrate, perpendicular to the
data lines;
a plurality of pixel areas on said first substrate defined by the data and gate lines;
data electrodes and common electrodes alternately formed in each of said pixel areas,
10 the data electrodes having a first transmittance area and the common electrodes having a second
transmittance area, wherein the first transmittance area equals the second transmittance area; and
a liquid crystal layer between said first and second substrates.
2. The in-plane switching liquid crystal display device of claim 1, wherein the data
15 electrodes and the common electrodes are on the same layer.
3. The in-plane switching liquid crystal display device of claim 1, wherein the data
electrodes and the common electrodes are on different layers.
- 20 4. The in-plane switching liquid crystal display device of claim 1, further comprising
at least one shielding layer on the first substrate under at least one of the common electrodes.

5. The in-plane switching liquid crystal display device of claim 4, wherein the shielding layer and the gate lines comprise a same material.

6. The in-plane switching liquid crystal display device of claim 4, wherein the shielding layer and the data lines comprise a same material.

7. The in-plane switching liquid crystal display device of claim 1, further comprising at least one shielding layer on the first substrate under at least one of the common electrodes and at least one additional shielding layer under at least one of the data electrodes such that light transmittance of the common electrodes is the same as light transmittance through the data electrodes

8. The in-plane switching liquid crystal display device of claim 7, wherein the shielding layer and the gate lines comprise a same material.

9. The in-plane switching liquid crystal display device of claim 7, wherein the shielding layer and the data lines comprise a same material.

10. The in-plane switching liquid crystal display device of claim 1, wherein a number of common electrodes having no shielding layer thereunder is equal to a number of data electrodes having no shielding layer thereunder.

11. The in-plane switching liquid crystal display device of claim 4, wherein the common electrode includes at least one outermost common electrode adjacent to at least one of said data lines; and

wherein the shielding layer is under the outermost common electrode.

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12. The in-plane switching liquid crystal display device of claim 1, wherein at least one of the data electrodes has a first width, and at least one of the common electrodes has a second width, the second width being greater than the first width.

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13. The in-plane switching liquid crystal display device of claim 12, wherein at least one of the data electrodes has a same width as at least one of the common electrodes.

14. The in-plane switching liquid crystal display device of claim 12, wherein the second width is 1.5 times the first width.

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15. The in-plane switching liquid crystal display device of claim 12, wherein the second width is 2 times the first width.

16. The in-plane switching liquid crystal display device of claim 1, wherein at least one of the data electrodes has a first width, and at least one of the common electrodes has a second width, the first width being less than the second width.

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17. The in-plane switching liquid crystal display device of claim 16, wherein the first width is one half the second width.

18. An in-plane switching liquid crystal display device, comprising:

5 first and second substrates;

a plurality of pixel areas on said first substrate;

data electrodes and common electrodes alternately formed in each of said pixel areas and patterned to have the same light transmitting area according to applied voltage; and

a liquid crystal layer between said first and second substrates.

10 19. The device of claim 18, further comprising a shielding layer under at least one of said plurality of data electrodes.

20. The device of claim 18, wherein said data electrodes and said common electrodes
15 are formed on planes different from each other.

21. The device of claim 18, wherein said data electrodes and said common electrodes are formed on the same plane.

20 22. The device of claim 18, further comprising a shielding layer for shielding outermost ones of said common electrodes.

23. The device of claim 22, wherein said shielding layer is formed under said outermost ones of said common electrodes.

24. The device of claim 22, wherein said shielding layer is on said outer most ones of
5 said common electrodes.

25. The device of claim 23, wherein said shielding layer formed on said common electrodes is integral with a black matrix on said second substrate.

10 26. The device of claim 18, wherein at least one of said common electrodes is wider than said data electrodes.

27. The device of claim 20, further comprising an insulation film on the data electrodes.

15 28. The device of claim 20, further comprising an insulation film on the common electrodes.

29. The device of claim 18, wherein said data electrodes and said common electrodes are a stripe type.

20 30. The device of claim 18, wherein said data electrodes and said common electrodes are zigzag type.

31. The device of claim 18, further comprising gate lines and data lines defining said pixel areas; and switching devices at cross points of said gate and data lines.

5 32. A method of manufacturing an in-plane switching liquid crystal display device comprising:

preparing the first and second substrates;

forming a plurality of gate lines and data lines on the first substrate to define a plurality of pixel areas;

10 forming a plurality of data electrodes and common electrodes to be alternately formed in each pixel area and having the same light transmitting area; and

forming a liquid crystal layer between the first and second substrates.

33. The method of claim 32, wherein said step of forming a plurality of data electrodes
15 and common electrodes includes:

forming an insulation film over a surface of the pixel area including the gate lines;

forming the data lines on the insulation film and forming a shielding layer having a predetermined width;

forming a first protective film on the surface including the shielding layer;

20 forming a plurality of data electrodes on the first protective film corresponding to areas between the shielding layer;

forming a second protective film on the surface including the data electrodes; and

forming common electrodes on the second protective film corresponding to areas between adjacent ones of the data electrodes.

34. The method of claim 32, wherein said step of forming a plurality of data electrodes
5 and common electrodes includes:

forming an insulation film over a surface of the pixel area including the gate lines;

forming data lines on the insulation film and forming a shielding layer having a
predetermined width;

forming a first protective film on the surface including the shielding layer;

10 forming a plurality of common electrodes on the first protective film;

forming a second protective film on the surface including the common electrodes; and

forming data electrodes on the second protective film corresponding to areas between
adjacent ones of the common electrodes.

15 35. The method of claim 32, wherein said step of forming a plurality of data electrodes
and common electrodes includes:

forming an insulation film over a surface of the pixel area including the gate lines;

forming data lines on the insulation film and forming a shielding layer having a
predetermined width;

20 forming a first protective film on the surface including the shielding layer; and

alternately forming common electrodes and data electrodes on the first protective film.

36. The method of claim 33, wherein outermost ones of the plurality of common electrodes in the unit pixel are substantially vertically aligned with the shielding layer.

37. The method of claim 34, wherein outermost ones of the plurality of common
5 electrodes in the unit pixel are substantially vertically aligned with the shielding layer.

38. The method of claim 33, further comprising the step of forming another shielding layer under at least one of the data electrodes.

10 39. The method of claim 34, further comprising the step of forming another shielding layer under at least one of the data electrodes.

40. The method of claim 33, wherein said shielding layer is formed of the same material as the data lines.

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41. The method of claim 34, wherein said shielding layer is formed of the same material as the data lines.

42. The method of claim 38, wherein the shielding layer is formed of the same material
20 as the data lines.

43. The method of claim 39, wherein the shielding layer is formed of the same material as the data lines.

44. The method of claim 32, wherein at least one of the plurality of common electrodes
5 is formed wider than the data electrodes.

45. The method of claim 32, wherein the data electrodes and the common electrodes are formed of a transparent conductive material.

10 46. The method of claim 45, wherein the transparent conductive material is ITO.